Contents

NUMBER 1, JANUARY/FEBRUARY

1 Profile of a new prazosin congener, BL-511A. Studies in the rat
Helen F. Oates, Lynette M. Stoker and G. S. Stokes

11 A study of the effects of steroids on α-adrenoceptor-mediated contraction of the rat vas deferens
R. A. Charlwood, G. M. Handberg and J. N. Pennefather

23 The lack of β-adrenoceptor involvement in the cardiac action of Δ^1-Tetrahydrocannabinol in rats
D. M. F. Li

31 Rat osteogenic sarcoma cells: modulation of hormone stimulated cyclic amp production by prostaglandin antagonists and biosynthesis inhibitors
D. Atkins, P. C. Waller and T. J. Martin

Short communication

41 Influence of sodium and potassium ions on the contraction induced by calcium ions in guinea-pig isolated vas deferens
J. Sugimoto, K. Hanasaki and H. Shintani

45 Proceedings of the Australian Society for Medical Research, held on 10–13 December 1978 at Cowes, Victoria, Australia

103 **Book Review**

NUMBER 2, MARCH/APRIL

105 Haemodynamic effects of nicergoline in man at rest and during exercise
F. Boismare and J. Lefrançois

113 Tritium excretion after intravenous administration of tritium labelled adrenaline and noradrenaline and digital vascular reactivity to adrenaline and noradrenaline in normotensive and labile hypertensive subjects
Daisy De Guia, Milton Mendlowitz, Nicholas D. Vlachakis, Stanley E. Gitlow and Mark Nissenbaum

119 Cardiac interaction between parathyroid hormone, β-adrenoceptor agents, and verapamil in the guinea-pig *in vitro*
F. Lhoste, T. Drüeke, Suzanne Larno and J. R. Boissier

129 Prostaglandins in the control of blood flow in canine skeletal muscle
Rosemarie Einstein and A. H. Goodman
139 Are neuronal uptake mechanisms responsible for the difference in sensitivity to noradrenaline between human arteries and veins?
M. J. Stevens and R. F. W. Moulds
147 The contractile response of smooth muscle to immersion in hypertonic solutions
C. T. Kirkpatrick, R. J. Morrow and T. Tomita
159 The effects of thyroid status on digoxin distribution in the rat
M. Veroni and G. M. Shenfield
169 Fluid and salt intake during the development of renal hypertension in rats
A. Schömig, M. Szokol, R. Dietz, J. B. Lüth and F. Gross
183 Comparison of haemodynamic responses to positive-end-expiratory ventilation and pericardial effusion in dogs
Simon W. Rabkin, Andrew L. Morris, Gyan P. Sharma and Brian Ayotte

Short Communications
195 Comparison of the vascular effects of adenosine, AMP, ADP and ATP on isolated blood-perfused internal and external carotid arteries of dogs
S. Chiba, T. Ohhashi and T. Azuma
199 Different potencies of [ASP^1, ILE^5]- and [ASN^1, VAL^5]-angiotensin II in stimulating aldosterone production from rat adrenal zona glomerulosa cells *in vitro*
F. A. O. Mendelsohn
205 Differential chronotropic and inotropic effects of 2-nicotinamidoethyl nitrate (SG-75) in the dog isolated atrium
S. Chiba, Y. Furukawa and M. Kobayashi
209 Studies on interaction of timolol, hydrochlorothiazide and amiloride in the rat
A. Scriabine, L. S, Watson, C. T. Ludden, H. F. Russo and N. R. Bohidar
215 Responsiveness of hypertensive subjects to prazosin
G. S. Stokes, J. C. Monaghan, E. P. MacCarthy and H. F. Oates
219 Failure of suppression of intrarenal angiotensin II in the contralateral kidney of one-clip two-kidney hypertensive rats
F. A. O. Mendelsohn
225 Influence of manganese ions on the contraction of the guinea-pig isolated vas deferens
J. Sugimoto, K. Hanasaki, H. Takemoto and H. Shintani
231 Haemodynamic interactions between α- and β-adrenoceptor antagonists in conscious or anaesthetized rats
Helen F. Oates and Lynette M. Stoker

NUMBER 3, MAY/JUNE

237 Antagonism of pentobarbitone sleep by dopamine, levodopa and apomorphine in chicks
G. Osuide and C. Wambebe

249 Mechanisms underlying the cardiovascular action of a new dihydropyridine vasodilator, YC-93
K. Satoh, T. Yanagisawa and N. Taira
263 Angiotensin, hypoxia, verapamil and pulmonary vessels
A. J. Suggett, F. H. Mohammed and Gwenda R. Barer
275 The influence of dibutyryl adenosine cyclic monophosphate on cell proliferation in the epithelium of the jejunal crypts, the colonic crypts and in colonic carcinomata of rat
P. J. M. Tutton and D. H. Barkla
281 Comparison of methods for eliciting the baroreceptor-heart rate reflex in conscious rabbits
I. B. Faris, J. Iannos, G. G. Jamieson and J. Ludbrook
293 Sodium balance and plasma renin activity during the development of two-kidney Goldblatt hypertension in rats
A. E. Doyle and S. G. Duffy
305 Preliminary studies on increased naloxone potency and its relationship to morphine tolerance and dependence in mice
Chak-Lam Wong, Man-Keung Wai and Michael B. Roberts
311 Role of the autonomic nervous system in the acute responses to renal artery pressure reduction in conscious dogs
W. P. Anderson and D. J. Casley
319 Tissue distribution of orally administered bismuth in the rat
S. P. Lee, T. H. Lin, J. Pybus and A. C. Clarke

Short communications

325 Effect of cortisol-induced inhibition of extraneuronal uptake on responses to isoprenaline in the kitten
R. G. Goldie
329 The effect of metoprolol and atenolol on plasma high density lipoprotein levels in man
John D. F. England, Leon A. Simons, Joyce C. Gibson and Michael Carlton
335 Maintenance of pseudopregnancy by prolactin in indomethacin treated rats
G. J. S. Tan
339 A method of determining intrinsic hepatic clearance from the first-pass effect
L. Bass and K. Winkler
345 **Letter to the Editor**

NUMBER 4, JULY/AUGUST

347 The action of aspirin on plasma kininogen and other plasma proteins in rheumatoid patients: relationship to disease activity
J. N. Sharma, I. J. Zeitlin, P. M. Brooks, W. W. Buchanan and W. C. Dick
355 Further investigations on the interaction between α-adrenoceptor antagonists and the central hypotensive effect of clonidine in rats, rabbits and dogs
Danita Tsoucaris-Kupfer, Dominique Bogaievsky and H. Schmitt

367 Serum dopamine β-hydroxylase (DβH) levels during tilting in patients with spinal cord injuries
A. Ohry, R. Rabinowitz and A. D. Korczyn
373 Prostaglandin release by aliphatic alcohols from the rat isolated lung
Molly Thomas, A. L. A. Bourma and Ramana Vijayakumar
383 Determination of catheter wall heat transfer in cardiac output measurement by thermodilution
M. E. Kim and Y. C. Lin
391 Renin secretion and renal vascular resistance following prolonged administration of desoxycorticosterone (DOC) in rats drinking normal saline
R. Vandongen and Anne Tunney

Short Communications
399 Changes in plasma during noradrenaline and adrenaline during isometric exercise
R. D. S. Watson, W. A. Littler and B-M. Eriksson
403 Route and rate of hydrallazine administration as determinants to its hypotensive effect in rabbits
T. Talseth, J. L. McNay and W. A. Clementi
407 Proceedings of the Australian Society for Medical Research, held on 16–19 December 1979, Thredbo, New South Wales

NUMBER 5, SEPTEMBER/OCTOBER

463 Haemodynamics of hypertension in pregnancy assessed by M-mode echocardiography
Hugh Larkin, Eileen D. M. Gallery, Stephen N. Hunyor, Akos Z. Gyory and E. Stewart Boyce
469 ACTH hypertension modifies the haemodynamic effects of prostacyclin infusions in sheep
R. T. Mason, K. J. F. Allen, J. P. Coghlan, D. A. Denton, D. T. Fei, W. F. Graham, B. A. Scoggins and K. W. Stewart
473 Tienilic acid in the treatment of mild to moderate hypertension
R. G. Walker, C. K. Yeung, A. S. P. Hua, G. W. Thomas, Judith A. Whitworth and Priscilla Kincaid-Smith
477 Captopril in mild and severe hypertension
N. M. A. Walter, Judith A. Whitworth and Priscilla Kincaid-Smith
481 The effect of intravenous administration of GABA and brain extracts on blood pressure in the rat
J. S. Horvath, Claire R. Baxter, G. Duggin and D. J. Tiller
487 Acute changes in blood pressure and vasoactive hormones after captopril in hypertensive patients
Barry P. McGrath, P. Geoffrey Matthews and Colin I. Johnston
493 Renal, adrenal and vascular changes during inhibition of converting enzyme with captopril
B. H. Clappison, J. A. Millar, D. J. Casley, W. P. Anderson and C. I. Johnston

499 Does the baroreceptor-heart rate reflex indicate the capacity of the arterial baroreceptors to control blood pressure?
J. Ludbrook, G. Marcia and A. Zanchetti

505 Reduced responses to noradrenaline of isolated digital arteries from hypertensives
Robert F. W. Moulds

509 Inhibition by hydralazine of the conversion of dopamine to noradrenaline in rat atria *in vitro* and *in vivo*
P. Songkittiguna, H. Majewski and M. J. Rand

515 Comparison of initial responses to renal artery stenosis in pentobarbitone—anaesthetized and conscious dogs
W. P. Anderson

521 The present status of the autoregulation theory of the parthogenesis of hypertension
P. I. Korner

527 Increased sodium permeability of erythrocytes in spontaneously hypertensive rats
J. S. Wiley, J. S. Hutchinson, F. A. O. Mendelsohn and A. E. Doyle

531 The effects of meclofenamate on renal and peripheral vascular beds in conscious rabbits
R. A. Banks, L. H. Beilin and J. S. Soltys

535 Assessment of neuronal uptake of noradrenaline in humans: defective uptake in some patients with essential hypertension
Murray Esler, Paul Leonard, Dianne Kelleher, Graham Jackman, Alex Bobik, Helen Skews, Garry Jennings and Paul Korner

541 The patho-physiology of chronic arterial hypertension: a hypothesis
G. W. Boyd

545 Stimulation by angiotensin of prostacyclin biosynthesis in rats and dogs
G. J. Dusting and Elizabeth M. Mullins

551 Angiotensin converting enzyme in the brain of spontaneously hypertensive rats
F. A. O. Mendelsohn, J. S. Hutchinson and J. Csicsmann

555 Hypotensive effects of captopril administered centrally in intact conscious spontaneously hypertensive rats and peripherally in anephric anaesthetized spontaneously hypertensive rats
J. S. Hutchinson and F. A. O. Mendelsohn

559 Effect of ACTH administration on the haemodynamic response to arginine-vasopressin in sheep
John P. Coghlan, Derek A. Denton, William F. Graham, Timothy J. Humphrey, Rex T. Mason, Edward G. Schnieder, Bruce A. Scoggins and Judith A. Whitworth

563 Activation of plasma prekallikrein and inactive renin by puff adder venom
Brian J. Morris, Christopher H. Lawrence and Daniel F. Catanzaro

569 Haemodynamic changes in ACTH-induced hypertension in sheep
W. F. Graham, J. K. F. Allen, J. P. Coghlan, D. A. Denton, T. J. Humphrey, B. A. Scoggins and J. A. Whitworth

573 Facilitation of sympathetic transmission by prejunctional β-adrenoceptors in cardiac and vascular tissues
I. C. Medgett, M. W. McCulloch, M. J. Rand and D. F. Story

579 Effect of β-adrenoceptor blockade on the renin response to acute natriuresis
Robert Vandongen, Anne Barden and Anne Tunney

NUMBER 6, NOVEMBER/DECEMBER

583 Effects of mexiletine on transmembrane action potentials as affected by external potassium concentration and by rate of stimulation in guinea-pig papillary muscles
Hideaki Sada, Takashi Ban and Shuzo Oshita

593 The influence of diethyl maleate on the biliary excretion of infused sulphobromophthalein sodium and its glutathione conjugate in guinea-pigs
Gregory Whelan

603 Testosterone-antibiotic effectiveness on *Staphylococcus aureus* infected rats
M. Atef and S. M. Sokkar

609 Tobacco smoking and cortical evoked potentials: an opposite effect on auditory and visual systems
Jeannette Friedman and Russell Meares

617 The cardiac and vascular effects of sodium glutamate
Paul L. Kirkendol, James E. Pearson and Norman W. Robie

627 Systemic and regional haemodynamics in experimental renal hypertension in conscious rabbits
Martin van Boom and Pramod R. Saxena

Short Communication

635 The hypotensive response to compound 48/80 in normotensive and hypertensive rats
Paul L. Kirkendol and Cynthia A. Cauvin

639 Proceedings of the Australasian Society of Clinical and Experimental Pharmacologists, held on 19–21 May 1980, University of Melbourne, Parkville, Victoria

695 **Letter to the Editor**

699 **Book Reviews**

701 **Author Index to Volume 7**